Atty Dkt No.: ROC920010332US1 Express Mail No. EL913563716US

WHAT IS CLAIMED IS:

1. A method of providing programming assistance for an integrated development environment, comprising:

receiving a code portion;

attempting to retrieve a corresponding structured query language (SQL) statement that corresponds with the code portion; and

generating a recommendation based on the code portion for restructuring the corresponding SQL statement.

- 2. The method of claim 1, wherein the recommendation comprises one of a recommended SQL statement and a textual spoken language recommendation.
- 3. The method of claim 1, further comprising displaying the recommendation.
- 4. The method of claim 2, further comprising displaying the corresponding SQL statement and the recommended SQL statement.
- 5. The method of claim 2, further comprising, prior to retrieving the corresponding SQL statement, determining whether the code portion can be modified to be processed more efficiently by substituting the corresponding SQL statement with the recommended SQL statement.
- 6. The method of claim 2, wherein the recommended SQL statement performs at least one function performed by the code portion.
- 7. The method of claim 2, further comprising, prior to generating the recommended SQL statement, retrieving a database type for providing a proper syntax for the recommended SQL statement.
- 8. The method of claim 1, wherein the code portion is configured to retrieve independent fields from a database.

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- 9. The method of claim 1, wherein the code portion is in Java.
- 10. The method of claim 1, wherein retrieving the corresponding SQL statement comprises retrieving the corresponding SQL statement from a prior execution of the code portion.
- 11. The method of claim 1, wherein retrieving the corresponding SQL statement comprises retrieving the corresponding SQL statement from a repository of predefined SQL statements.
- 12. A computer-readable medium containing a program which, when executed by a processor, performs an operation providing programming assistance for an integrated development environment, the operation comprising:

receiving a code portion;

attempting to retrieve a corresponding structured query language (SQL) statement that corresponds with the code portion; and

generating a recommendation based on the code portion for restructuring the corresponding SQL statement.

- 13. The computer-readable medium of claim 12, wherein the recommendation comprises one of a recommended SQL statement and a textual spoken language recommendation.
- 14. The computer-readable medium of claim 12, further comprising displaying the recommendation.
- 15. The computer-readable medium of claim 13, further comprising displaying the corresponding SQL statement and the recommended SQL statement.
- 16. The computer-readable medium of claim 13, further comprising, prior to retrieving the corresponding SQL statement, determining whether the code portion

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can be processed more efficiently by substituting the corresponding SQL statement with the recommended SQL statement.

- 17. The computer-readable medium of claim 13, wherein the code portion is configured to retrieve independent fields from a database.
- 18. A computer, comprising:
- a memory containing a programming assistance program for an integrated development environment; and
- a processor which, when executing the programming assistance program, performs an operation comprising:

receiving a code portion;

attempting to retrieve a corresponding structured query language (SQL) statement that corresponds with the code portion; and generating a recommendation based on the code portion for restructuring the corresponding SQL statement.

- 19. The computer of claim 18, further comprising a display device and wherein the operation further comprises displaying the recommendation on the display device.
- 20. The computer of claim 18, wherein the recommendation comprises one of a recommended SQL statement and a textual spoken language recommendation.
- 21. The computer of claim 18, further comprising displaying the corresponding SQL statement and the recommended SQL statement.
- 22. The computer of claim 18, further comprising, prior to retrieving the corresponding SQL statement, determining whether the code portion can be processed more efficiently by substituting the corresponding SQL statement with the recommended SQL statement.

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23. The computer of claim 18, wherein the code portion is configured to retrieve independent fields from a database.